## EFFICACY REVIEW F793 INSECTICIDE; EPA File Symbol: 270-GGO

DATE:

09/21/04

DP BARCODE:

D308388

GLP:

No

CHEMICAL:

Diflubenzuron (0.24%)

CHEMICAL NUMBER:

108201

**PURPOSE:** 

Provide efficacy data to support product registration.

MRID:

46275501. Pennington, R; Dyer, J. (2004) Discussion of Efficacy

Studies and Conclusions: F793 Insecticide. Project Number: F793ESRA, F793S54, F793S55. Unpublished study prepared by

Ecto Development Corp. 7p.

**TEAM REVIEWER:** 

Kable Bo Davis

EFFICACY REVIEWER: Kable Bo Davis, M.S., Entomologist

## **BACKGROUND:**

Please see efficacy review dated July 20, 2004 (D304898). The following recommendations were recorded: 1. Additional data using the recommended dose rate must be submitted. 2. All future studies must administer the product as instructed on the label. 3. When conducting bioassays, all future studies should use both fly eggs and larvae. 4. The following proposed label claims must have supportive data submitted or be removed from the label...

On September 8, 2004 the registrant submitted MRID 46275501 by fax and questioned the Agency as to whether or not it had been included in the original efficacy review. This MRID was not reviewed; it was inadvertently not included with the original data package for review.

MRID 46275501 is a discussion of the conclusions found within the four studies covered within the July 20, 2004 efficacy review, and provided explanations to the deficiencies in that review. In addition, this MRID chronologically links each of the studies and helps explain why particular materials and methods were chosen.

## RECOMMENDATIONS:

The submitted data supports registration of the proposed product. All efficacy requirements for the registration of this product have been met. The following recommendations were included in the July 20, 2004 efficacy review, but have been expanded upon or altered with respect to the findings of the current review.

1. "There is not enough data showing that this product is efficacious at the labeled recommended dose rate of 6.8 mg of a.i. per 100 lbs. of body weight (0.15 mg of a.i. per kg of body weight) to support product registration. Of the four submitted studies, only one used the recommended dose (.154 mg). From this one treated horse, four different groups of bioassays were taken, with each introducing either house fly eggs, house fly larvae, stable fly eggs, or stable fly larvae. Of the four, only two (house fly eggs and stable fly larvae) were effective at substantially reducing adult fly emergence. Bioassays using house fly larvae resulted in reducing emergence by only 39%, while bioassays using stable fly eggs had inconclusive data as a result of low pretreatment counts. Additional studies using a minimum of ten horses treated with the recommended daily dose rate need to be submitted."

After review of the MRID 46275501, it has been decided that no further data need to be submitted using the recommended dose rate.

2. "Depending upon the study, and the institution responsible for conducting the bioassays, some tested dose rates introduced either fly eggs, fly larvae, or both. Future submitted studies should use both eggs and larvae."

After review of MRID 46275501, it has been decided that any future submissions containing bioassays should use both fly eggs and larvae or just fly eggs. Studies containing bioassays using just fly larvae will not be accepted.